Frankly Speaking

"D" Day for Traffic Engineers

SUNDAY, OCTOBER 1, will mark a *"Day of Decision"* for those attending the Annual Business Meeting of the Institute of Traffic Engineers.

The goals of Traffic Engineering are broad and clear. Our sense of direction seems sound. If, we will only plan, now, *our next few steps* on a foundation of fact, then those traffic engineers, who left to aid in preserving our right to decide freely our own destinies, professional and otherwise—Yes! if those at the Annual Meeting will weigh the next few steps—all traffic engineers can look forward confidently and optimistically to a future of great service and satisfaction.

We, the editors of TRAFFIC ENGINEERING, are gratified with the cooperation afforded us. We are encouraged at the expressions of willingness of the readers of TRAFFIC ENGINEERING to help in the preparation of magazine material.

From your answers to T.E.'s recent questionnaire, will the policy and content of your magazine be determined.

Your kind comments and your suggestions for improving TRAFFIC ENGINEERING make those who helped build it and those who are maintaining its standards feel well repaid.

Our readers can rest assured that every effort will be made to improve the appearance of the magazine with more illustrations, more charts, graphs and photographs.

Factual material, technical articles, engineering practices and research, cost figures and data sheets will be diligently sought.

Case studies, experiences of others and discussions of what one reader terms "screw driver" traffic engineering will receive full attention where the problem most needs attention.

Your editors will maintain a breadth of perspective embracing the broader elements of fields related to street and highway traffic and will, at all times, retain a proper sense of proportion and dignity befitting a publication for professional traffic engineers.

Final results of your questionnaires will be presented at the Business Meeting in Chicago, October 1. Be present—

"D" day and decide!

Leslie Williams

Editor, TRAFFIC ENGINEERING

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Traffic and City Planning

by J. W. Arch Bollong

COMPREHENSIVE city planning or master city planning has to do first with long-range policies and objectives, and second, with specific construction programs and schedules.

Framework of Facts: In the first place there should be a study of the community to ascertain with what there is to start. We should have an analysis of the following:

1. *The community as a whole; its* present and probable future in relation to the state, the region, the nation, and world economy.
2. *The people:* population trends in numbers; characteristics such as size of families, age groups, races, skills, etc.
3. *Economics of the community:* industries, resources, natural and otherwise; advantages and disadvantages with respect to raw materials, labor supply, markets.
4. *Present layout;* where the people live, where they work, and where they play.
5. *Land uses:* location of residences, business and industry, public services and facilities, and areas used at present compared with those actually needed and most suitable for each use.
6. *Housing:* a part of the land use problem that requires special attention.
7. *Transportation:* public, private, local and long distance, and terminals for both passengers and freight.
8. *Trends:* decentralization or other shifts in location of business areas, industrial areas, and residential areas; and appraisal of the forces back of such trends.

Kinship of Streets: Any city must realize that the existence of streets is vital to its progress—providing light and air and access for the buildings bordering them, and channels for travel from place to place. In streets are also located utilities, sewer systems, water mains, telephone and electric light lines, and on the surface is provided the means for local transit.

The widening of any street or avenue has a dual effect on property values; first, in providing additional access, and second, in providing increased property use and earning power. Such widening, while increasing the accessibility and attraction for business, often lessens the attraction for residence purposes unless proper treatment is made.

It is important, however, in attempting to relieve traffic congestion to note that re-arrangements must be made in accordance with a comprehensive plan to take care of future needs.

Seattle's population, for example, has grown from 40,000 in the 90's to over 500,000 at the present time; and during the same period, the metropolitan population has grown to over 600,000 persons.

Traffic Factors in Seattle: The number of automobiles registered in Seattle in 1920 was less than 35,000. In 1942 there were 186,000 vehicles registered which number has decreased to 170,000 at the present time due to war conditions. This is one automobile for every *three* persons—a high per capita rate in the nation as compared with

An article prepared for Traffic Engineering by J. W. Arch Bollong, Traffic Engineer, City of Seattle, Wash., July, 1944.

other cities—Pittsburgh having one automobile for every seven persons and New York one automobile for every nine persons.

As highway construction has progressed outside Seattle, the hinterland has been brought closer and closer. Four-lane federal highways enter the city from the south, north and east. From the west we have the waters of Puget Sound, over which operates one of the largest ferry systems in the United States, bridging these waters to a connection with highways to the west. The construction of these very highways and the improvement of street surfaces within the city has brought volumes of business that would have never reached Seattle. At the same time these highways have aided decentralization from the business districts and the city in general through accessibility to the surrounding country by means of the automobile.

In spite of war conditions, 145,000 vehicles daily cross the bridges within the city limits of Seattle. 203,500 vehicles enter and leave the central business district of Seattle daily from the north, south and east. Much of this traffic passes straight through the central district and unduly congests and interferes with the transaction of business.

Planning surveys made by the Public Roads Administration in various States have outlined the traffic movement throughout the nation. In a P.R.A. report to the President, statement was made that the greatest need in the United States today, insofar as highways are concerned, is the construction of adequate highways into and through metropolitan areas. These planning surveys set forth the fact that the average trip of the average car owner was 5 miles which was evidenced by traffic flow maps constructed in and around various metropolitan areas. The national average local public transportation ride is estimated at a similar distance.

Interdependence of Various Transportation Media: It is important to note the relation of various types of transportation in use on our streets. Of the total of 175,000 vehicles in this city, 18,000 are trucks. Many of these are the overland type that serve communities 50, 100, 200, 300 miles distant from Seattle. Many communities are dependent entirely upon the operation of trucks for freight transport. Comparing public transit and travel by private car within the city, surveys made during the past year in Seattle showed that public transit vehicles carried from 420,000 to 450,000 passengers daily. Private cars carried a like amount. Hence, both types of passenger transportation media are very vital to the city, and proper facilities should be provided for both. Traffic moving over adequately designed major thoroughfares, with appropriate consideration given to all types of transportation, is very necessary to urban progress.

Need for Freeways: Seventy-five percent of all traffic movement should be carried on 15% to 20% of the street mileage within Seattle and a major street system fulfilling these conditions is already in operation. In addition to this major street system there should be freeways provided and planned for the future. *A freeway is a public way devoted exclusively to the movement of vehicles, separated from adjoining property by physical barriers through which ingress and egress are prohibited.* A freeway provides for uninterrupted traffic flow by division of opposed parallel traffic streams and by separation of cross traffic with properly designed entrances and exits at reasonably spaced intervals. Traffic requirements for fast passenger and commercial vehicles without accident are not adequately met by ordinary highways,

with grade intersections, left turns, stop signals, curb parking and other interruptions to steady flow of movement. Continued decentralization however threatens harmful results unless freeways are properly planned and integrated into a Master Plan for Seattle and for any other city of its size and type.

Freeways should take advantage of topographical conditions away from conflict with other arteries. They should be planned in connection with county and state major thoroughfares so that there is a completed circulatory plan for the whole. This concept shows the need for metropolitan planning; that is, planning outside and within the city as a unit in order that these highly important freeways can be correlated when carried into and through the city.

Corollaries to Thoroughfares: As corollaries of the transportation plan the following should be considered:

Terminal Parking: The parking of vehicles upon roadways (especially in the central business district) designed for 10 to 20-ton loads is not economical and forces the construction of additional roadways. Plans should be made for the future for off street parking areas in the central district and closely adjacent thereto, and parking prohibited entirely on the heavily travelled streets. Use can probably be made of areas that are becoming somewhat blighted for this purpose.

Transport Truck Terminals: We are all aware of the economy in constructing railroad terminals in certain areas. Considering the vital part that trucking operations play in the development of this city, plans should be laid for confining all truck terminals to designated areas in a city. This measure would enhance the transfer of freight from terminal to terminal, concentrate operations of like character within adjacent areas, and at such locations where turning movements of such heavy equipment would not be occasioned on heavily travelled arterials.

Improved Transit Facilities: In view of the place local transit plays in the daily life of the city and in shaping its growth and character, adequate public improvements are necessary for expediting public carriers in conveying the masses of people who depend upon and prefer this transportation medium.

Highways to Airports: Looking into the future and the importance that the passenger and freight plane will play in the development of cities, thought should be given to airplane terminal locations and adequate highways leading to them.

In conclusion, there are two approaches to the urban traffic problem: first, make use of existing street facilities by means of sound traffic control and street re-arrangement and second, plan major highways and freeways into and through the city to connect with those in the surrounding territory and in accordance with a sound comprehensive City or Master Plan.

Plan Now to Attend

I. T. E. ANNUAL MEETING

CHICAGO - OCTOBER 1, 2, 3, 4

See Page 315 For Preliminary Program

Bicycles

by EARL ALLGAIER

IN SOME ways the bicycle is a hybrid as far as street traffic is concerned —a sort of compromise between a pedestrian and a motor vehicle. Because of this the bicycle brings with it special problems. Various measures with more or less success have been taken to reduce the hazards to bicycle riders.

A few isolated cases are too frequently used to prove or disprove the efficiency of a given plan. Only an unbiased analysis of all facts available will form the basis for a sound program. Too often a few examples are not at all typical of what the results of a program are most likely to be. Some information which should be of use to those individuals concerned with the bicycle problem is found in the following data taken from studies made by the American Automobile Association.

Extent of Bicycle Usage

Unlike automobiles, it is impossible to get an accurate count of bicycles in use. Estimates received from 230 cities indicated that bicycle density varies with the size of the city as shown in Table I.

If the cities reporting were typical of each population group, then there would be a total of 5,841,000 bicycles in use by the slightly over 75,000,000 people living in cities over 2,500.

TABLE I

PERSONS PER BICYCLE

Size of City	No. of Cities Reporting	Persons Per Bicycle
2,500—5,000	17	10.2
5,000—10,000	41	9.2
10,000—25,000	52	8.6
25,000—100,000	80	11.4
100,000—500,000	30	13.9
500,000—1,000,000	8	18.7
1,000,000 and Over	2	22.6
	230	Avg. 12.7

A majority of cities replying (3 out of 5) indicated that a bicycle ordinance was in effect. This figure may be somewhat biased as it is quite probable that cities with a bicycle ordinance are more interested in the problem and therefore more likely to reply to a questionnaire.

Registration and Inspection

Fees charged ranged from nothing up to $1.00, the most common fee being 25c. The fees charged are shown in the following table:

TABLE II

REGISTRATION FEES CHARGED

Fees Charged	No. of Cities
$0.00	14
.10	5
.15	3
.25	113
.35	3
.50	36
1.00	3

Two thirds of the cities required annual registration while in the remaining cities registration was required only when bicycle ownership changed. It would seem that annual registration would be more effective in recovering stolen bicycles since the authorities would have a chance to check the bicycle with their records of a year previous and any changes in ownership would have to be proved by the person seeking to register a bicycle.

Earl Allgaier (Jun.) is Traffic Research Specialist with the American Automobile Association. More detailed information than is given in the summaries of this article may be had by writing to the Traffic Engineering and Safety Department, American Automobile Association, Washington 6, D. C.

Of 177 cities requiring registration, 118 had bicycle inspection. The study did not include information as to who made the inspection or how frequently the inspection was made.

Bicycle Deaths Increase

In the 10 year period from 1932 to 1942, traffic deaths involving bicycles increased 86% while at the same time all traffic deaths decreased 4%. In 1942 one bicycle rider was killed for each 16 pedestrians. Over half the persons killed in bicycle accidents are 14 years of age or younger. Control of bicycle traffic probably warrants more consideration than it usually receives.

Registration and Thefts

A bicycle ordinance is sometimes advocated as a panacea for the bicycle problem, there apparently being considerable belief that this control will greatly reduce accidents and discourage thefts. The results are by no means as clear cut as one might expect.

Reports from over 150 cities with a total population of 26,000,000 were analyzed to obtain some factual information on the value of registration. From 1936 to 1942 there has been a gradual increase in the number of bicycles stolen, for cities *without* registration. The increase over this period amounted to 50%. This increase is probably due in part to increased bicycle useage. During the same period there has also been an increase in the number of stolen bicycles recovered. The data on trends in bicycle use are very limited. The following table is based on 16 cities with a total population of 5½ million and requiring bicycle registration.

TABLE III

TRENDS IN BICYCLE REGISTRATION

Year	Bicycles per 1,000 Population
1938	31
1939	33
1940	36
1941	40
1942	39

There were very few cities *with registration* over the entire period so it was impossible to determine any trend in thefts and recoveries for these cities.

The following table based on nearly 100 cities with a total population of over 14,000,000 gives the bicycle thefts and recoveries for cities with and without registration.

TABLE IV

RECOVERY OF STOLEN BICYCLES

	Bicycles Stolen Per 100,000 Pop.*		Bicycles Recovered Per 100,000 Pop.*		% Recovered	
	1941	1942	1941	1942	1941	1942
Cities with registration	227	224	153	156	68%	70%
Cities without registration	148	170	61	66	41%	39%

*NOTE: Comparisons to population are used inasmuch as numbers of bicycles owned (or in use) are not accurately known for the cities without registration.

It will be noted that many more bicycles are reported stolen in cities with bicycle registration than without. It is quite probable that this difference is due in large part to the more complete reporting of thefts encouraged by bicycle registration.

More than twice as many stolen bicycles were recovered per 100,000 population in cities with registration than in cities without. Police records should be fairly accurate in both cases. Results from 14 cities which adopted registration within the past few years indicate that about 60% more bicycles were recovered in the two years after registration than in the two years prior to registration. *It is apparent that bicycle registration assists materially in recovering stolen bicycles.* However, before an ordinance is adopted the total cost to bicycle owners should be compared with the value of the additional bicycles likely to be recovered.

Registration and Bicycle Accidents

An analysis of the records of over 100 cities with a combined population of over 26,000,000 was made to determine whether cities with bicycle registration had fewer accidents than those without registration. There was no significant difference in the deaths or injuries per 100,000 population for cities with or without bicycle registration. As far as this analysis is concerned the data do not warrant the adoption of a bicycle ordinance *as a means of reducing bicycle deaths or injuries.*

Highway Transportation In War Production

by CAPTAIN J. E. P. DARRELL

IN discussing highway transportation as a factor in war production, it is desirable to look back to the last War and make comparisons between conditions then existing and the present situation. Highway transportation has undergone a great development during the past twenty-five years and this fact is responsible for many of the changes that have taken place in war production practices.

During the last War, industrial activity was largely confined to the established industrial areas where sufficient manpower was available and where transportation facilities were adequate. Highway transportation was in the early stages of development. The years since the war have seen a major improvement in vehicles and extensive highway construction programs with the result that the situation today is much different.

With the development of highways and vehicles to travel over them, manufacturing plants have made greater use of these facilities. During the last few years, many war plants have been built in rural or suburban areas away from adequate rail facilities and wholly dependent upon highway transportation for both workers and materials. There are instances today, because of the motor vehicles, of workers traveling 60 or more miles from their home to work each day. This was hardly possible twenty-five years ago except in cases where rapid transit or commuter trains were available.

The Transportation Corps of the U. S. Army has a vital interest in all transportation problems which directly or indirectly affect the war effort. Through its Zone and District Offices close contact is maintained with local traffic organizations, transportation companies, associations and local representatives of other governmental agencies. It is the purpose of such activities to avoid delay and to avert a breakdown in transportation facilities which might cause interruption of war production.

Highways

New construction during the past two years was restricted largely to access roads. Other highway improvements during this period consisted chiefly of the repair or replacement of sections of highway directly essential to war transportation.

According to Mr. John T. Lynch,

Paper delivered by Captain J. E. P. Darrell (Mem.) before the Michigan Highway Conference, Grand Rapids, Michigan, 1944.

Senior Highway Economist, Public Roads Administration, the indicated decrease in total vehicle-mileage on main rural roads from 1940 to 1943 is about 45% in the East, 34% in the Mid-West and 31% in the West. The corresponding truck mileage decreases are 24%, 20% and 9% respectively. Traffic by truck combinations, however, increased in all regions since 1940 and the increases in average weights nearly offset decreases in vehicle mileages so that ton-mileage by truck in the United States as a whole in 1943 will be only about 5% less than in 1940.

The requirements of war transportation have shifted some traffic to secondary and local roads that were never intended to carry large volumes of traffic. It has become necessary to rearrange maintenance programs to make provision for the heavier maintenance responsibilities on these routes which have suddenly become important in war time transportation.

Directives of the War Department place with the Chief of Transportation and the Chief of Engineers joint responsibility in connection with study of highway improvement projects. The Zone Transportation Officers are now required to report upon the essentiality of proposed highway improvements where War Department interest is involved. These reports are considered by the War Department and by the War Production Board in determining the action to be taken regarding the necessary priorities and authority for the work. It is necessary to show that war time transportation requirements of interest to the War Department are involved and that the project would be essential to the war effort.

Vehicles

Vehicle, gasoline and rubber conservation is still a matter of serious concern.

Controls will undoubtedly continue to be necessary until the end of the war. There is nothing to indicate that we might expect an early relaxation of the many restrictions which control highway transportation today.

There has been agitation on the part of employees of some industrial and business organizations to change back to the starting and quitting times in effect before the war. These attempts must be resisted. The seriousness of the employee transportation problem demands a "hold the line" policy with respect to staggered hours programs. No change should be made in starting and quiting hours unless such a change will improve transportation conditions.

Efforts to conserve and extend the life of the private passenger car must be continued. Public transportation facilities including buses and trolleys are overcrowded and could not handle the additional load should a greatly accelerated rate of retirement of passenger cars develop.

What has been said regarding personnel transportation applies equally to the movement of freight. Trucks occupy a most important place in the War Production Program as well as in the transportation of essential civilian goods. Surveys conducted by the Michigan State Highway Department in 1941 indicated that 69% of the tonnage going into the Michigan plants and 67% of the tonnage going out moved by motor transport.

Information obtained from the Detroit City Planning Commission shows that approximately 2,000 trucks entered and left that city daily in 1943. These figures did not include intra-city truck movements. The loss of any material part of this capacity would interfere very seriously with the essential production of war materials.

A recent release of the Office of Defense Transportation stated that mo-

tor trucks moved 98% of last year's huge farm crop at some stage of the journey from farm to market. Certainly this is essential transportation.

Trucking companies are at the present time faced with several very difficult problems. Two of the more troublesome ones being manpower and repair parts. The Office of Defense Transportation and the War Production Board have recently reorganized their facilities and procedures to assist the trucking industry in obtaining repair parts and other equipment essential to highway transportation. Mechanical breakdowns have been less numerous last winter than might normally be expected during this season of the year. Even so, the District Transportation Office received many calls from truckers who had equipment laid up for the lack of replacement parts. In many instances this equipment was laid up for weeks or months. In the meantime, badly needed units are withdrawn from essential service. It is hoped that with the assistance of O.D.T., W.P.B., and other national agencies and as a result of new policies which have been adopted, this condition will be improved.

In order to make most efficient use of truck equipment, the trucking industries have been encouraged to enter into joint action plans. Joint action plans consist of arrangements between two or more carriers whereby they agree to consolidate some or all of their operations so as to conserve equipment and manpower.

Joint action plans have not always worked out as effectively or as satisfactorily as had been hoped. Many mistakes have been made and many lessons have been learned. This type of operation, however, can be very helpful in this time of equipment shortages and the Office of Defense Transportation, the War Production Board and the Army are encouraging cooperation of this kind between the truck operators wherever possible.

Manpower

At the present time the problem of adequate manpower in the Highway Transportation Field is extremely critical. During normal times, it is possible to develop effective driver-training programs and to build up efficiently operating organizations. Today, most Highway Transportation Companies along with other employers are finding it increasingly difficult to obtain not only good help but any help at all. Trucking organizations are usually small in comparison with other forms of transportation and the loss of key personnel is more difficult to replace.

Until recently highway transport has not been officially listed as an essential industry with reference to manpower problems. Progress is being made, however, and as a result of numerous conferences and negotiations between Selective Service Officials, representatives of the War Manpower Commission, the Army and the industry, highway transport in critical occupations has obtained the necessary manpower priorities. It is hoped that in the future experienced drivers and mechanics and other essential personnel in the Highway Transportation Industry will be treated the same as skilled workers in other essential war activities.

Estimates reaching the District Office indicate that several of the larger companies have from 20 to 30% of their units temporarily tied up because of the lack of drivers or mechanics.

In spite of critical shortages highway transport must and will continue to function. To make up for the lack of new vehicles it is essential that existing ones be used effieciently and that every possible mile be squeezed from them.

Schenectady's Bureau of Traffic and City Planning

by EVERETT L. FINCH

The following is an article entitled "Traffic Control, Planning for City's Future Showed Way for Other Communities," by Everett L. Finch, as published in Schenectady's daily papers.

IN at least one aspect of municipal activity Schenectady under Council-Manager government has blazed the trail of the pioneer.

It was probably the first American municipality to organize an entirely separate bureau or department for the study and solution of the complex problems of traffic and city planning. When the Bureau of Traffic and City Planning was established March 1, 1938, there was, according to its director, Fred W. Fisch (Assoc. Member, Institute of Traffic Engineers), only one other city on the continent with a similar set-up. That was the Canadian city of Toronto. Since 1938 many other cities have followed Schenectady's suit.

Inasmuch as the need for a specialized approach to Schenectady's growing traffic problems was the prime reason for the creation of the bureau, it was natural that the accent of its first studies was on traffic with little emphasis on city planning.

During the past year the emphasis has shifted. It is now on city planning in preparation for the post-war period.

This change in emphasis, it would seem, was bound to come in any event. With its traffic studies largely completed, except for keeping them up to date, with many remedial measures suggested by these studies already effected, the bureau had attacked and solved most of its pressing traffic problems. It had reached the time when it could devote more and more of its attention to the second function for which it was created.

The Bureau of Traffic and City Planning had its inception in the view widely held by interested organizations that many problems of city planning and traffic were not receiving necessary attention. A citizens' traffic committee recommended its organization. It had also the indorsement of the Schenectady Safety Council and the traffic committee of the Chamber of Commerce.

Made Traffic Survey

Its first activity was a comprehensive traffic survey, carried on as a WPA project. This was necessary to secure information on traffic movement, locations at which most accidents were occurring, causes of these accidents and related data. The material collected has served and, brought up to date, is serving as a basis for general traffic planning. These preliminary studies took more than a year to complete.

They furnished the first overall picture of the traffic situation ever assembled in Schenectady.

Statistics collected in these tedious early surveys made possible many corrective measures. Essential traffic signs were installed. The traffic signal system was improved and expanded. Directional arrows and walk-lights at some points made their appearance. Street markings jumped from 66,000 lineal feet in 1938 to a peak of 160,-

000 lineal feet in 1941. The figure for 1942 was 111,000 lineal feet and for 1943, 131,290 lineal feet, part of this decrease being due to the fact that some markings did not have to be repeated each year. New traffic rules and regulations were placed in effect. The bureau sponsored city-wide programs of traffic education. Arrests for violations increased as a result of specialized and intensified enforcement efforts following the bureau's studies. Accidents dropped sharply until the war in Europe brought an unprecedented boom to Schenectady's industries, bringing also a sharp rise in traffic volume and a somewhat smaller proportionate rise in accidents.

Win National Awards

As a result of these and other measures, Schenectady holds several national traffic and pedestrian safety awards, based on balanced traffic engineering, education and enforcement programs.

The walk-lights which were installed in the downtown business district were something of a novelty when they made their appearance in 1939. *Few cities had them then. They have helped reduce accidents. In fact, how better traffic and pedestrian control plus stricter enforcement measures can sharply cut personal injuries due to traffic mishaps has been proven in the State St. block between Jay St. and Broadway where accidents dropped 69 per cent in the nine-month period following the installation of the walk-lights as compared to an average similar period of each of the three previous years.*

Before the establishment of the City Traffic Commission in 1939, City Council was obliged to act by resolution or ordinance on almost every trivial traffic matter. The commission provided the machinery for directing the placing of traffic signs and markers, for making emergency traffic rulings for designating crosswalks, safety zones, public carrier stands, etc., and for trying out traffic rules and regulations on an experimental 90-day basis. If rulings of the commission are found to work out well after this experimental period, they are recommended to the City Council for its consideration and action. Members of the commission are the city manager, the director of the Bureau of Traffic and City Planning and the police chief.

Meter Revenue High

Meters were introduced in the business section in 1941 to provide more positive parking controls, both as to time and manner. These meters, now fully paid for, are turning out to be a not inconsiderable source of municipal revenue, even under wartime driving restrictions. The 1944 budget estimates meter fees at $50,000.

A board of accident-review was set up to promote safety instruction among city drivers. It was subsequently expanded to include industrial as well as automobile accidents in its province. It has since been discontinued because of lack of personnel.

Studies in connection with the removal of safety islands in State St., the setting up of a plan for the removal of Schenectady Railway Co. trackage (interrupted by the war), a new traffic ordinance, the writing of an ordinance licensing taxicab operators in 1941 which is now being superseded by a new ordinance expected to license drivers as well as operators and to fix fees, and the granting of a new franchise to the railway company, have engaged the attention of the bureau.

Wartime traffic studies have been carried on in cooperation with the War Transportation Committee of the War Council to promote group and share riding, staggering of hours at industrial plants, business places and

schools and the securing of equipment and replacement parts for bus operators.

Wartime agencies or groups with which the bureau has cooperated in solving emergency problems include the ODT, WMC, WPB, USES, bus operators and union officials.

This imposing record of accomplishment in the field of traffic cannot yet be matched by an equally imposing list of achievements in the field of city planning.

However, a land use survey, sponsored by the City Planning Commission as a WPA project, was initiated to ascertain the actual use of some 30,000 land parcels in the city. The purpose is to keep zoning requirements in balance with the changing and growing needs of the community.

Aided Defense Housing

Studies were made by the bureau in connection with the Municipal Housing Authority's plans for Steinmetz Homes and Lincoln Heights, defense housing projects which have since been completed.

At present, the bureau is concentrating on preparing for the City Planning Commission and the City Council the summary of post-war projects which department and bureau heads feel are necessary and desirable. After these are "screened" by the Inter-department Post-War Programming Committee, recently appointed by City Manager C. A. Harrell, they will be referred to civic organization planning committees for review and suggestion from the standpoint of civic need. After they are then referred to the City Planning Commission for its approval as related to the city plan, they will be turned over to the City Council for its approval as related to the capitol budget and the sequence in which approved projects will be consummated. After City Council has acted they will be submitted to the State Post-War Planning Commission for its approval as post-war projects and to obtain 50 per cent of the cost of preparation of the contract plans.

The Bureau of Traffic and City Planning serves as the technical agency for the City Planning Commission. In this connection it was designed to secure and analyze the data upon which the commission could base its recommendations to City Council for the better city of the future.

The two agencies should work together in complete harmony.

Actually, this has not been the case and any discussion of city planning cannot refuse to recognize the friction resulting from this clash of viewpoints.

One school of thought is that city planning is a continuous process, best handled by a planning bureau which is a part of the municipal government set-up and which can keep the city plan adjusted to changing conditions.

The other view is that the best method is to obtain the services of an expert consulting city planner who has had the benefit of planning procedures in many types of cities and has the advantage of outside perspective. This would entail a city plan which is necessarily developed over a

Armor Coated Roads In Connecticut

Steel-asphalt highway surfacing is being "installed" in Darien, Conn., by Town Engineer Walter Bates, with the cooperation of makers of steel grid. The American Public Works Association is quoted as saying that according to those interested, this experiment may presage a revolution in street and highway design.

space of a few months. Once developed and once approved by the City Council, it becomes the city's master plan to be kept up to date by the City Planning Commission as need for change presents itself in order to secure the best use of it.

A glance at Schenectady's 1944 budget suggests a possibe compromise between these two ideas may be worked out. You will find there, under the Division of Post-War Planning, an item of $2,500 for consulting service.

National Conference On Street and Highway Safety Modernizes Uniform Vehicle Code

SOMETHING unusual in the way of legislation has been turned out in Washington. Congress had nothing to do with it. State and local officials from all parts of the country, foregathering at the United States Chamber of Commerce with representatives of civic and private organizations, have produced an up-to-date revision of the Uniform Vehicle Code.

This code, first written in 1926, was designed for the guidance of states in enacting motor control laws. The original code still is used as a standard by the states in framing traffic laws.

During the early days motor vehicle regulations, like Topsy, had "jest growed." States, cities, and even villages had each adopted such measures as seemed advisable to control this new element. The result was a hodgepodge of rules and regulations, many of which were sensible, but some of which verged on the fantastic. There was no uniformity to these statutes, yet each was law, and ignorance of the law provided no excuse for the innocent violator. Such was the state of affairs when, in 1924, the first National Conference on Street and Highway Safety was called together in Washington.

The basic purpose of the meeting was to develop methods for reducing the toll of highway accidents. It soon became apparent that one of the most promising ways to accomplish this would be to bring about some measure of agreement in the laws and regulations governing the automobile driver. Standarization by federal action was not a practicable solution because law and custom had established the supremacy of state authorities in this field. Accordingly, it was decided to prepare a "model' statute embodying the latest and best practices to serve as a guide which would be followed by the several states to whatever extent might be practicable or desirable in each case. The result was the first uniform vehicle law.

By an evolutionary process this original code has been supplemented until it now comprises five separate acts, which can be adopted by state legislatures either separately or as a whole. These contain optional provisions that give a considerable degree of flexibility while still maintaining the principle of standardization. The titles of these acts are:

Act I—Uniform motor vehicle administration, registration, certificate of title, and antitheft act.

Act II—Uniform motor vehicle operators' and chauffeur's license act.

Act III—Uniform motor vehicle civil liability act.

Act IV—Uniform motor vehicle safety responsibility act.

Act V—Uniform act regulating traffic on highways.

In addition, the Conference has prepared a set of model traffic ordinances in harmony with the uniform vehicle code designed for enactment by municipalities. It has also worked with the American Association of State Highway Officials and the Institute of Traffic Engineers in sponsoring a manual on uniform traffic control devices, including signs, signals, markings, and islands.

In preparing the original code and its subsequent revisions, the objective has not been to blaze new trails, but rather to recognize and standardize existing practice. For this reason there never has been, and probably never will be, absolute uniformity in motor vehicle regulations among the several states. Some necessarily serve as pioneers, and the experience thus gained, after it has received the test of actual practice, is later considered for incorporation into the uniform vehicle code.

States Adopt Code

This procedure for promoting uniformity in motor vehicle laws has worked out very well in practice. The uniform vehicle code, as a whole or in part, has been adopted by 21 states substantially as written. An additional 19 states and the District of Columbia follow it in principle, if not in language. Only 8 states still stick by codes of their own. It is interesting to note that several of the non-conformists are states which, before the uniform code was written, were leaders in the development of efficient automobile regulations. The very fact that their own laws were so excellent at that time deterred them from adopting the standard code, and the habit of mind thus generated has since persisted.

Aside from statistics, the practical demonstration of the success achieved for standardization in the field of motor vehicle regulation is the fact that now the average motorist who conforms with the familiar driving habits developed in his home community and state can travel almost anywhere with very little fear of prosecution for the technical violation of some unknown and unsuspected regulation.

This does not mean that the job has been finished. New developments in automotive design, in highway construction, and in safety standards recurrently call for changes to keep the uniform vehicle code up to date. The original code, first issued in 1926, has been revised several times—in 1930, 1934, 1938, and now, in 1944, it is once more being brought up to date. Undoubtedly additional changes will be found necessary in the future.

In approaching the current revision the Conference found the uniform vehicle code to be still basicly sound and steadily growing in acceptance. Aside from a few minor revisions and clarifications in language, the principal task was the addition of new sections made necessary by recent developments, notably the rapid extension of the modern highspeed superhighway, with its multiple lanes and divided roadways. This made it necessary to redefine an intersection, so that it would be clear that in crossing a divided highway with a separation strip 30 feet or more wide two intersections are traversed rather than one. Provisions governing right and left turns were re-written to place greater responsibility on the driver making the turn, and to emphasize the importance

of making such turns from the proper part of the roadway. Conditions under which it is permissible to overtake and pass a car on its right side were also clarified, and the restriction against following another car too closely made more emphatic. State authorities were given more control over parking, both in the open country and within municipalities, where angle parking sometimes hinders the movement of traffic on through routes. The definition of a "business district" as it affects permissible speed was also clarified.

Pedestrians

Because of the heavy proportion of accident victims among the ranks of the pedestrians, much consideration was also given to the problem of controlling their actions. A move to make universal compliance with traffic lights mandatory was not adopted, but the code was amended to authorize local authorities to adopt such a regulation. A provision was added directing pedestrians to use sidewalks and footpaths instead of the roadway whenever these facilities are available and, if not, to walk facing oncoming traffic wherever practicable.

Drunk Drivers

Perhaps the most striking change in the code to be adopted was the addition, for the first time, of a method for determining the effect of alcohol upon a motorist's ability to drive. A prohibition against driving while under the influence of liquor has always been a part of the code, but the legal proof of this condition has hitherto depended entirely upon the observation and testimony of witnesses. Now it is provided that cognizance may be taken of the alcoholic content of the driver's breath, blood, urine, or other bodily substance, as determined by a laboratory test. If the result shows less than 0.05 per cent by weight of alcohol, the presumption is that he is sober. If the test reveals 0.15 per cent of alcohol or more, he is presumed to be under the influence. Results between 0.05 and 0.15 per cent are inconclusive, and other evidence must be considered in making a determination of his condition.

Bicycles

The growing use of the bicycle as a means of transportation was the cause of other changes in the uniform code. The Conference several years ago included in its model traffic ordinance for municipalities a series of regulations classifying the bicycle as a vehicle, and requiring riders to obey all pertinent regulations for the control and regulation of traffic. Previous provisions of the uniform traffic act for state enactment, have now been amplified to correspond.

Of interest to the younger generation is a provision added to the uniform motor vehicle operators' license act authorizing the issuance of special learner's permits to children under the legal driving age. These will be valid only in specially equipped driver training cars operated on designated sections of the highway under the supervision of an approved instructor. This change was made to facilitate driver training courses in the high schools.

In the penalties sections, the optional jail sentence was eliminated as a punishment for first-offense convictions of minor violations because this has had the effect, in certain jurisdictions, of removing such trials from the cognizance of the lower courts. Clearer definitions have also been given to the terms suspension, cancellation, and revocation of licenses. Convictions for minor violations not involving moving vehicles need no longer be reported to a central authority,

relieving this machinery of the burden caused by large numbers of parking convictions.

Lighting

Pending completion of certain studies now under way, only minor changes were voted in lighting regulations. The optional back-up light was exempted from a general provision that all lights directed to the rear, except stop lights, must be red in color, and a provision added that the back-up light must not be used while the car is in forward motion. Flashing white turn-indicator lights on the front of a car were freed from a limitation to 300 candlepower, as it has been found that greater brilliance is necessary to make them clearly apparent in bright sunlight. A provision was added requiring emergency vehicles to carry at least one red light directed forward.

All of these changes, and many others of a minor nature, are as yet no more than recommendations. They will be drafted into the model code and widely distributed for criticism and comment, after which it is expected that state and municipal authorities will give careful consideration to their inclusion in existing traffic laws and ordinances. While this process will take time, it also gives insurance against ill-considered and too-hasty action. Each change that is finally adopted will be one more step toward the goal of consistency in motor vehicle regulation, the achievement of which will mean fewer accidents and greater peace of mind to the traveling motorist. And the happy time is coming when his number will be legion.

SECOND NEW ENGLAND TRAFFIC ENGINEERING CONFERENCE

Planning for new expressways and redesign of existing thoroughfares to save time and relieve congestion, plus the amelioration of many other street and highway traffic ills and the efficient and safe flow of traffic in postwar years, was the theme of the highly successful Second New England Traffic Engineering Conference, held at Massachusetts Institute of Technology, July 13 and 14.

More than 200 transportation technicians from the six New England states attended, as well as representatives of governmental and other agencies from outside the New England states. Attendance included representatives of federal, state and municipal governments, safety councils, public transit companies, educational institutions, and insurance.

The Conference was co-sponsored by the Civil Engineering Department of Massachusetts Institute of Technology and the Traffic Engineering Section of Massachusetts Department of Public Works. Arrangements for the Conference were coordinated by the traffic and transportation division of the National Conservation Bureau, accident prevention department of the Association of Casualty and Surety Executives, New York City.

The Conference was held at this time in order that officials charged with the responsibility for achieving better traffic flow through engineering methods, might inaugurate long term planning for handling the tremendously increased motor vehicle traffic expected after the war. Speakers were

traffic engineers and official authorities who are actively engaged in various phases of street and highway transportation.

The subjects presented in prepared papers were:

The Highway Traffic Problem; What Traffic Engineering Should Contribute to Post-War Planning; Lessons from Wartime Restrictions on Motor Vehicle Use; Ways and Means of Accomplishing Post-War Aims; Limited Access Arteries; Effect of Design Details on Highway Efficiency and Accidents; Urban Traffic Planning; The Place of Public Transit in the Future of Urban Transportation; Express Highways in Cities and the Parking Problem; Highway Planning Studies in Connecticut.

The Conference concluded with a panel discussion on Post-War Highway Planning and Traffic Problems in New England.

Speakers and Panel Participants were:

Edgar F. Copell, Traffic Engineer, Massachusetts Dept. of Public Works.
C. B. Breed, Professor of Civil Engineering, Massachusetts Institute of Technology.
Herman MacDonald, Commissioner, Massachusetts Dept. of Public Works.
Theodore M. Matson, Director, Bureau for Street Traffic Research, Yale University.
A. J. Bone, Asst. Prof. of Highway Engr., Massachusetts Institute of Technology.
Hon. William J. Cox, Commissioner, Connecticut State Highway Department.
Sidney M. Shapiro, Deputy Chief Engineer, Long Island State Park Commission.
Joseph Barnett, Chief, Urban Road Division, Department of Design, Public Roads Administration, Washington, D. C.
Harold F. Hammond, Director, Traffic & Transportation Division, National Conservation Bureau.
Walter Devine, Town Engineer, Brookline, Massachusetts.
Charles Gordon, Managing Director, American Transit Association, New York.
Lloyd Reid, Traffic Engineer, City of Detroit.
Curtis J. Hooper, Supervisor of Economic Studies, Connecticut Highway Dept.
Ralph Sawyer, Traffic Engineer, Maine State Highway Commission.
Frederick A. Gardner, Public Relations Engineer, New Hampshire Highway Dept.
Joseph C. Cressey, Manager, Highway Planning Survey, Massachusetts Dept. of Public Works.
W. H. Sharp, Engineer, Connecticut State Highway Commission.

Prior to our participation in the war, several regional and statewide traffic engineering conferences had been held throughout the country. It is significant that the New England area has revived these Conferences as a means of promoting greater knowledge of new methods in street and highway design and improvement, the exchange of ideas among traffic engineers, and increased cooperation among those technicians who are responsible for the design details of our streets and highways and our traffic signs, signals and markings.

The National Conservation Bureau reports that plans for similar conferences in other areas are now being arranged. This is a strong indication that the traffic problems which will arise with the greatly increased use of the automobile will in many cases be anticipated and solved before they can inconvenience and endanger street and highway users.

The Proceedings of the Conference are being published and will be distributed by the National Conservation Bureau, 60 John Street, New York, N. Y.

China's Automobile Industry

China plans to construct $1,000,000 of highway in the thirty post-war years. They expect to have an automobile production of 2600 cars in the first year, reaching approximately 80,000 during the thirtieth year.

A GUIDE POST IN PLANNING TOMORROW'S HIGHWAYS
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SEVENTH NATIONAL INSTITUTE FOR WARTIME TRAINING

The Yale Bureau for Street Traffic Research conducted a highly successful two-weeks Traffic Engineering course in conjunction with the Seventh National Institute for Wartime Traffic Training at Northwestern University, June 19-30. Twenty practicing traffic engineers and transportation officials representing fourteen states, enrolled for the course.

Interest among this group clearly showed that parking conditions in urban areas are among the most important traffic problems confronting public authorities charged with the responsibility of handing traffic matters. Similarly, the penetration of urban areas by non-stop thoroughfares which must be constructed in the post-war era will challenge the ability of both state and city authorities. It is believed that sound proposals to accommodate traffic in American cities must increasingly depend on traffic engineering skills and analyses. To this end, state and city engineers will require training in street and highway operations matters.

The course of instruction included traffic surveys and studies; the design, application and use of traffic control equipment such as signs, signals and markings; governmental regulations affecting motor vehicle transportation; traffic engineering techniques especially helpful in meeting wartime traffic problems; the theory of channelization in design and redesign of intersections; traffic rules and regulations including such measures as one-way streets, parking, through-streets, turning, speed control, etc.; the influence of traffic operation on planning modern traffic facilities.

ITE NEWS AND PERSONALS

TO MEMBERS AND ASSOCIATE MEMBERS OF THE INSTITUTE OF TRAFFIC ENGINEERS:

Listed below are the candidates nominated by the Nominating Committee for offices in the Institute for the year beginning at the time of the next Annual Meeting (October 1, 1944).

President—Harold F. Hammond (for a term of one year).
Vice-President—Thomas J. Seburn (for a term of one year).
Secretary-Treasurer—Wilbur S. Smith (for a term of one year.)
Director—Harry Neal (for a term of two years).
Director—W. Graham Cole (for a term of two years).

The By-Laws provide that: "Additional nominations for any office may be made by petition signed by not less than five voting members, of whom not less than three shall be Members. Each such petition shall be accompanied by the written consent of the nominee to run for the office for which he is nominated, and must be received by the Secretary not later than August 1st."

Ballots have been mailed to all members of the Institute of Traffic Engineers qualified to vote.

Yale-I.T.E. Seminar

The second Yale-I.T.E. Seminar will be held at Strathcona Hall, Yale University, August 28 and 29. Theodore Matson and President Hammond have been developing a program for discussion. The Seminar will probably be devoted largely to traffic engineering policy and some consideration will be given to administrative and technical matters for establishing Traffic Engineering on a sounder professional basis.

There will be no formal papers; however, a schedule of topics is being arranged so that the Seminar will be directed toward a predetermined objective.

All members of the Institute of Traffic Engineers are invited and urged to take part in this two-day event. Those planning to attend should advise the Bureau for Street Traffic Research as soon as possible so that they can assist in making room reservations at local hotels.

Grant Mickle has called a meeting of his entire Post-War Planning Committee, to be held on the day following the Seminar, August 30.

The New York I.T.E. Section will hold its first Fall banquet meeting also on August 30, which all I.T.E. members who will be in the vicinity should attend. See following page for details.

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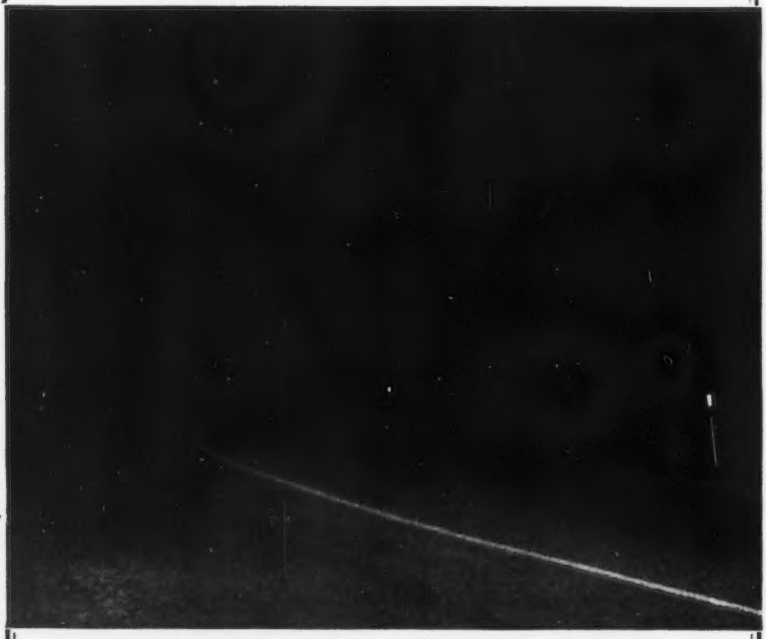

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New York I.T.E. Section Meeting

Wednesday evening, August 30, will witness the first Fall meeting of the New York Section. Laurence Waterbury, Consulting Engineer and member of the Institute, will tell the group of the work he is doing in Texas with relation to planning location of the Inter-Regional Highway.

The meeting will be held at the Baronet Cafe, 108 E. 41st Street, New York City (one block from Grand Central Station), and will start at 7:00 P.M.

Reservations for the banquet should be made immediately with Henry Evans, at Institute Headquarters.

Institute Committee Surveys Cities

D. Grant Mickle, Chairman of the Institute of Traffic Engineers Post-War Planning Committee, announces that his Committee is undertaking a survey of post-war plans in all U. S. cities of over 50,000 population.

A questionnaire and accompanying letter is being mailed to Mayors and City Managers with the suggestion that the questionnaire be referred to the engineer charged with the responsibility of traffic safety and facilitation.

It is the intention of the Committee to publish a complete report shortly, based upon research studies conducted during the past year and the results of the answers received in this questionnaire.

The questionnaire is limited to the one phase of traffic safety and facilitation. First, inquiries are made regarding off-street parking and terminal. Next, traffic control devices are taken up. The third section of the questionnaire asks about intersection redesign, pedestrian islands, street widenings, and other plans for increasing safety. Next, questions are asked regarding factual studies which have been or will be made, such as volume and origin and destination surveys. The fifth section of the questionnaire deals with street lighting, followed by an inquiry regarding the administrative head or department giving full time to these materials of traffic engineering.

"THE" QUESTIONNAIRE

Improvement is obtained only for the price of "eternal vigilance." Our magazine is improving. Its readers attest to their desire for making it better and better by the numbers who are sending in the July Questionnaire. If you haven't received your Questionnaire, send in for it today. Make this your own magazine through action.

Ten Point Post-War Traffic Safety Program Issued

Forty national organizations, including the Institute of Traffic Engineers, warning that "a high traffic death toll cannot and will not be tolerated in America after the war," have released a comprehensive action program for post-war highway safety.

It calls for immediate action in every community and state to prepare in advance to meet the complex problems that will arise when restrictions on travel are lifted, and pledges "full cooperation to federal, state and local officials who must do the job."

The program was drafted by a special committee headed by Kenneth B. Colman, prominent Seattle, Wash., business man, and was published for the joint sponsors by the National Safety Council.

"America cannot socially countenance nor financially afford the tragic waste represented by the 39,969 traffic deaths in the last pre-war year of 1941," Mr. Colman said. Highway

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accidents have taken 750,000 American lives since 1900.

The program recognizes there is no panacea for these and other post-war traffic problems, and that measures must be fitted to local conditions as problems develop.

The following ten major considerations are proposed in the program:

1. Build safety into all new highway construction and improvements.
2. See that every state and important city has competent traffic engineering services.
3. Rebuild depleted police departments and provide adequate training of personnel.
4. Greatly expand facilities and regulations for vehicle inspection.
5. Provide greater specialization in the handling of traffic cases in court.
6. Expand facilities and personnel for improved driver licensing.
7. Resume and expand accident reporting and analyses.
8. Expand safety instruction in schools, including driver training.
9. Carry on programs of safety education for adult drivers and pedestrians.
10. Enact or revise regulatory and enabling legislation required to effect the above improvements.

The program is published in a 20-page pamphlet entitled, "Danger—Traffic Jam Ahead." Write to the Institute of Traffic Engineers, 60 John St., New York, N. Y., today for copies.

Yale Bureau Report Issued

A twenty-four page report of the past, present, and future activities of the Bureau for Street Traffic Research at Yale University has been issued. Several pages are devoted to the war contributions, listing assistance given the Army and federal and local agencies, and other projects, conferences and training.

In the report it is learned that 61 of the 129 living Bureau graduates are commissioned officers in the Armed Forces.

The report discusses the post-war plans for resumption of the traffic engineering training program that was interrupted by the war and the possibility of regular publication of a technical bulletin.

PERSONALS

Lieut. Richard Siver, Traffic Engineer for the Naval Operating Base, Norfolk, Virginia, the past two years, was discharged from the Navy this past month and is back in White Plains again.

Elroy L. Erickson, Traffic Engineer, National Safety Council is making a special study of the relationship of highway elements to traffic accidents along Route 1 through Virginia in cooperation with members of P.R.A. staff. Mr. C. F. McCormack of N. S. C. is collaborating with Mr. Ericksen.

Lt.-Col. John M. Paver was discharged this past month from the Army. He has been serving in the 2nd Bombing Wing in England for the past year or more.

Mr. Paver has resumed his activities as Managing Director of the Traffic Audit Bureau. His new address is: Traffic Audit Bureau, McGraw Hill Building, New York City.

Virden Rittgers, Traffic Engineer for Rockland Coaches, Inc., and Chairman of the Institute Membership Committee, is working up routes and plans for helicopter service to augment existing bus service between Bergen County, N. J., Rockland County, N. Y., and Manhattan, N. Y.

Stuart Hawley, Traffic Engineer for the Texas Company, states that immediately upon Germany's surrender there will be a tremendous surge of vacation travel, particularly in the extreme North and South of the U. S. War workers are planning to use their accumulated savings for that long-awaited vacation trip in the interim period between leaving the war job and finding another job. Hawley says the Texas Company expects this vacation travel to reach 1940 proportions.

WHAT *this* ARMY-NAVY "E" MEANS TO YOU

Secretary of the Navy James Forrestal said, when conferring the Army-Navy "E" on Eagle Signal Corporation,

> "Your effort, as shown by your remarkable production record, is helping our country along the road to victory. May I extend to you men and women of the Eagle Corporation my congratulations for accomplishing more than seemed reasonable or possible a year ago."

To qualify for this recognition, Eagle Signal adopted new methods, new techniques and new principles, insuring the highest quality and uniformity of its products, all of which are now reflected in its regular products.

Eagle Signal Corporation thereby retains its leadership in the manufacture of Traffic Control Systems.

EAGLE SIGNAL CORPORATION

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Plant No. 1

Eagle Signal Awarded "E"

Cited for outstanding war production, Eagle Signal Corporation of Moline, Illinois, was awarded the Army-Navy "E" on July 21, 1944.

Eagle Signal Corporation, a national leader in the manufacture of electric signals and traffic control equipment, was congratulated by Secretary of the Navy, James Forrestal, for accomplishing "more than seemed reasonable or possible a year ago." Army and Navy speakers at the ceremony emphasized the Corporation's growth from a small plant at the time of its acquirement by the Gamewell Company in 1928, to its present important position in the traffic signal field.

In addition to the record-breaking production of electro-mechanical products for which the company received the "E" Award, Eagle has supplied essential control equipment for many camps and war areas.

Engineers Study Plans For Denver Freeway

One of the chief post-war projects for Denver, Colo.—a freeway to distribute motor traffic entering the city to outgoing arteries and to business and residential sections without overcrowding existing streets—will be the subject of an engineering study by the State Highway Department, Charles D. Vail, state highway engineer, has announced.

An existing road follows the Platte River through the city. It is planned to extend this by a roadway along the river to a connection with highways entering Denver from the north and east. Distribution of city-bound travelers will be made at one or two points along the proposed route by ramps and cloverleaves. Elevated roadways will carry traffic over railroad yards. Under the plan through travelers will be able to traverse Denver with a minimum of traffic delay.

POLICE CHIEFS HOLD FORWARD-LOOKING DISCUSSIONS

One thousand police chiefs from the United States, Canada, Mexico, England, and the Central and South American countries assembled in Cleveland for the 51st annual conference of the International Association of Chiefs of Police on August 14, 15 and 16. Panel discussions, rather than formal addresses, predominated.

Paul G. Hoffman (Hon. Mem. I.T.E.), was the speaker at the association's banquet.

Michael F. Morrissey, of the Federal Security agency's social protection division, president of the association, presided at a session on "Co-operation among Police Agencies of the World." Other speakers on this subject were Manuel Benitez, brigadier general of the Cuban Army and chief of the Cuban national police; Brig. Gen. D. C. Draper, chief constable of Toronto, Can., and Hugh H. Clegg, assistant director of the FBI.

The sessions for the city and state chiefs were devoted to discussions of highway traffic problems of today and of the post-war period. Other police problems such as professional standards, education and training and public relations techniques were part of these sessions.

"Post-War Police Planning" was the subject of a panel discussion Wednesday morning at which Chief Charles W. Dullea, of San Francisco, presided, with Superintendent Don F. Stiver, of the Indiana State Police, as co-chairman. Other topics of panel discussions were "Plant and Property Protection," "Police Communications" and "Federal, State and Local Police Co-operation."

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A recent poll shows that most state highway departments are rushing plans for post-war roads and streets. Many are getting reliable and comprehensive figures on traffic flow with Streeter-Amet Traficounters.

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Program for 1944 Meeting, Institute of Traffic Engineers

Sunday, October 1

10:00 A.M.—Committee Meetings
2:00 P.M.—Business Meeting

Monday, October 2

9:30 A.M.

Fitting Transportation Services Into the City Plan
L. Segoe—Consulting Engineer and City Planner

State-City Relationships in Postwar Highway Construction
Samuel C. Hadden—President, American Association of State Highway Officials

The Place of Public Transportation in Freeway Planning
Charles Gordon—Managing Director, American Transit Association

2:00 P.M.

The Picture of Postwar Traffic (Round Table Discussion)

The Highway
Joseph Barnett—Chief, Division of Urban Design, P.R.A.

The Vehicle
Donald Blanchard—Society of Automotive Engineers

The Driver
William J. Dearden—Deputy Commissioner of Motor Vehicles, New Jersey

The Control of Traffic
Martin E. Bruening—Traffic Control Engineer, Milwaukee, Wisconsin

Tuesday, October 3

9:30 A.M.

The Traffic Engineer's Place in Highway Research
Roy W. Crum—Director, Highway Research Board

Parking Needs of a Modern City
Thos. E. Willier—Research Associate, Bureau for Street Traffic Research, Yale University

Effectiveness of Pavement Markings
Harry E. Neal—Chief Engineer, Division of Traffic and Safety, Ohio State Highway Department

Traffic Signal Warrants
Robert A. Mitchell—Chief, Bureau of Traffic Engineering, Philadelphia, Pennsylvania

Improved Measures of Accident Exposure
David M. Baldwin—Traffic and Transportation, National Safety Council

2:00 P.M.

What Will Actually Be Done to Improve Traffic Flow in the Postwar Period
Discussion Leader—D. Grant Mickle, Traffic Engineer, Automotive Safety Foundation
(Selection of cities to be represented will be guided by replies from I.T.E. Postwar Planning Committee's questionnaire)

Wednesday, October 4

9:45 A.M.

Joint Session With Safety Engineers Group, Street and Highway Traffic Section, National Safety Council

The Impact of Traffic Accidents on War Industry
Henry K. Evans—Traffic Engineer, National Conservation Bureau

New Techniques in Relating Traffic Accidents to Highway Elements
H. McCormack—Traffic and Transportation, National Safety Council

Panel Discussion
Panel Leader—Harry E. Neal

Discussion Subjects:
The Place of the Traffic Engineer in Postwar Air Transportation
The Need for Traffic Engineers in Planning Commissions
The Place of the Traffic Engineer in Metropolitan Government

2:00 P.M.

Joint Session With Street and Highway Traffic Section, National Safety Council
Plans for Postwar Traffic Safety: Addresses by Presidents of American Association of Motor Vehicle Administrators; American Association of State Highway Officials; International Association of Chiefs of Police; Institute of Traffic Engineers.

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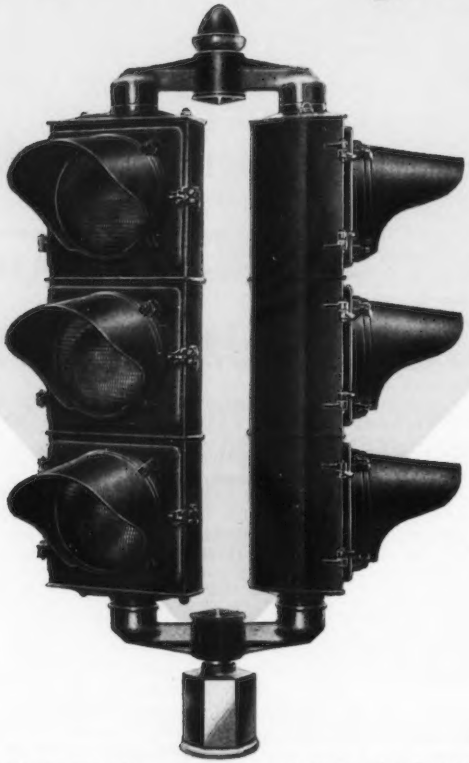

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